

What Is Claimed Is:

1. A transmission comprising:
 - an input shaft for inputting drive force from an engine;
 - an output shaft disposed concentrically with the input shaft so as to be capable of relative rotation with respect to the input shaft;
 - a first layshaft disposed parallel to the input shaft and the output shaft;
 - a speed reduction gear connected between the output shaft and the first layshaft in a constant-mesh manner; and
 - a plurality of transmission gear pairs provided between the input shaft and the first layshaft or output shaft to mutually engage and to transmit the rotational force of the input shaft to the output shaft, wherein said transmission further comprises:
 - an input gear fixedly attached to the input shaft;
 - a second layshaft disposed parallel to the input shaft;
 - a second layshaft gear that engages the input gear and is disposed on the second layshaft; and
 - a braking mechanism for braking the input shaft by braking the second layshaft gear.
2. The transmission according to claim 1, wherein the second layshaft is a reverse idle shaft fixed to a transmission case, the second layshaft gear is a reverse idle gear disposed rotatably on the reverse idle shaft, and the braking mechanism is provided to the reverse idle gear.
3. The transmission according to claim 1, wherein the second layshaft is a reverse idle shaft rotatably supported by the transmission case, the second layshaft gear is a reverse idle gear fixedly attached to the reverse idle shaft, and the braking mechanism is provided to the reverse idle shaft.
4. The transmission according to any of claims 1 to 3, wherein the braking mechanism is a wet multiple disk clutch.

5. The transmission according to claim 2, wherein the braking mechanism is a wet multiple disk clutch, clutch disks thereof on one side are provided to the second layshaft gear side, and clutch disks on the other side are provided to the second layshaft side.

6. The transmission according to claim 2, wherein the braking mechanism is a wet multiple disk clutch; the clutch center thereof, which is a piston of the wet multiple disk clutch, is connected to the second layshaft gear side; and the outer clutch, which is a cylinder of the wet multiple disk clutch, is connected to the second layshaft side.

7. The transmission according to claim 3, wherein the braking mechanism is a wet multiple disk clutch; clutch disks thereof on one side are provided to the second layshaft side; and clutch disks on the other side are provided to the transmission case side.

8. The transmission according to claim 3, wherein the braking mechanism is a wet multiple disk clutch; the center clutch thereof, which is a piston of the wet multiple disk clutch, is connected to the second layshaft side; and the outer clutch, which is a cylinder of the wet multiple disk clutch, is connected to the transmission case side.

9. The transmission according to any of claims 1 to 8, wherein the braking mechanism is provided inside the transmission.